

Title (en)

ELECTRONIC DEVICE AND METHOD FOR CHARGING BATTERY

Title (de)

ELEKTRONISCHE VORRICHTUNG UND VERFAHREN ZUM AUFLADEN EINER BATTERIE

Title (fr)

DISPOSITIF ÉLECTRONIQUE ET PROCÉDÉ DE CHARGE DE BATTERIE

Publication

**EP 3443637 A4 20190417 (EN)**

Application

**EP 17782649 A 20170411**

Priority

- KR 20160045039 A 20160412
- KR 2017003919 W 20170411

Abstract (en)

[origin: US2017294793A1] Provided are a battery charging method and an electronic device. The electronic device includes a connector that includes a first terminal to which a voltage is applied by an external charger and a second terminal for transmitting and receiving data, and a first charging circuit configured to charge a battery of the electronic device by using the voltage applied to the first terminal. The first charging circuit may include a communication circuit configured to transmit information related to the battery through the second terminal, a voltage converter configured to convert a voltage supplied to the battery and a first controller circuit configured to obtain first information regarding a voltage of the battery, control the communication circuit to transmit the first information to a charger connected with the connector, and control the voltage converter to charge the battery using a voltage adjusted based on the first information by the charger, if the adjusted voltage is applied to the first terminal.

IPC 8 full level

**H02J 7/00** (2006.01); **H01M 10/44** (2006.01); **H02J 7/04** (2006.01); **H04M 1/02** (2006.01)

CPC (source: EP KR US)

**H02J 7/00034** (2020.01 - KR); **H02J 7/00036** (2020.01 - EP KR US); **H02J 7/00047** (2020.01 - EP KR US); **H02J 7/0045** (2013.01 - US); **H02J 7/00714** (2020.01 - EP US); **H02J 7/007182** (2020.01 - EP KR US); **H02J 7/007194** (2020.01 - EP KR US); **H02J 7/04** (2013.01 - EP); **H02J 7/00** (2013.01 - US); **H02J 7/00034** (2020.01 - EP US); **H02J 2207/10** (2020.01 - US)

Citation (search report)

- [XYI] US 2015069957 A1 20150312 - CHANG ARTHUR H [US], et al
- [Y] US 2015270733 A1 20150924 - INHA KAI [FI], et al
- [Y] US 2015280457 A1 20151001 - JUNG KU CHUL [KR], et al
- See also references of WO 2017179894A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

**US 10256653 B2 20190409**; **US 2017294793 A1 20171012**; CN 109075588 A 20181221; CN 109075588 B 20220329; EP 3443637 A1 20190220; EP 3443637 A4 20190417; EP 3443637 B1 20211215; KR 102657052 B1 20240415; KR 20170116853 A 20171020; WO 2017179894 A1 20171019

DOCDB simple family (application)

**US 201715483388 A 20170410**; CN 201780023473 A 20170411; EP 17782649 A 20170411; KR 20160045039 A 20160412; KR 2017003919 W 20170411